

REMARKS

Claims 1-17 are currently pending in the application. By this Substitute Amendment, claim 1 is amended and claims 8-17 are added for the Examiner's consideration. Support for the amendment(s) and added claims 8-17 is provided in at least Figures 4A-4C and at page 5 of the present specification. The Substitute Amendment corrects informalities to the amendment of claim 1 of the Amendment it replaces. No new matter is added. Reconsideration of the rejected claims in view of the above amendments and the following remarks is respectfully requested.

Objection to Drawings

The drawings were objected to because Figures 3A and 3C used reference character "22" to designate both the "safety hook" and the "metal grounding". The drawings have been amended to use "20" to designate the metal ground in both of the figures. Accordingly, Applicant respectfully requests that the drawing objection be withdrawn.

35 U.S.C. §112 Rejection

Claims 1-6 were rejected under 35 U.S.C. §112, 2nd paragraph, for having insufficient antecedent basis for the terms "the end of cable" and "the shell." This rejection is respectfully traversed. By this amendment, Applicant has amended claim 1 to provide proper antecedent basis for the aforementioned terms. Claim 1 has also been amended to more clearly set forth the subject matter of the invention. Accordingly, Applicant respectfully requests that the rejection of claims 1-6 be withdrawn.

35 U.S.C. §103 Rejection

Claims 1 and 3-7 were rejected under 35 U.S.C. §103(a) for being unpatentable over Applicant's admitted prior art (hereinafter "APA") in view of U. S. Patent No. 5,489,275 issued to Thompson, *et al.* ("Thompson"). This rejection is respectfully traversed.

The Invention

In Figures 4A-4C of the application, various examples of embodiments of the claimed invention are shown. In these embodiments, an electrical connector has a connector body adapted to have a cable fixed therein to be mechanically supported by a strain relief clamp fixable to the connector body. The strain relief clamp has a window in it which allows a surface of the cable to be viewed when the electrical connector is assembled. The surface of the cable is marked with identification marks.

In use, the cable is cut at a prescribed point so that when the electrical connector is assembled, a preselected identification mark is visible through the window. By cutting various cables at different prescribed points, each cable may be distinguished from one another based on the identification mark exposed by the window of the corresponding connector.

Thompson

Thompson is directed to an identification ring for a catheter. The Thompson catheter has a cylindrical body with markings thereon. Each of the markings indicates one of the specific locations within the living body at which the distal end of the catheter may be placed during insertion into a living body. A sleeve having a window is movably mounted on the catheter body and can be selectively moved into various positions to align the window of the sleeve with a prescribed marking on the catheter body.

By moving the sleeve of a particular catheter to bring the window into alignment with a prescribed marking, the location of that catheter's tip within the body may be identified. Thus, as the surgeon inserts multiple catheters into various locations within a body, each catheter's window may be aligned with the appropriate marking to identify the location of the tip of that catheter. When multiple catheter's are used in a surgical procedure, aligning each catheter's window with the marking that corresponds to the tip's location helps the surgeon keep track of each catheter's tip's location.

Thompson is from a different technical field

Applicant notes that the Thompson catheter is used in the medical arts, and the invention is an electrical connector used in the electrical arts. One of reasonable skill in the electrical arts would not have knowledge of various catheter designs from the medical arts, and would not be aware of such a catheter design. This is especially apparent because the Thompson catheter marking system is for indicating one of the specific locations within the living body at which the distal end of the catheter may be placed during insertion. (Thompson Abstract). An electrical engineer looking for a way to identify a cable grouped together with possibly hundreds of other cables would have no motivation to turn to an apparatus identifying catheter tip location within a living body for a solution. This is especially true when the solution is in a different field directed to solving a different problem. Accordingly, there is no motivation to combine Thompson with the APA because they are from different technical fields.

The Thompson identification function is temporary and on a different component

Applicant notes that the Thompson window is disposed in a movable sleeve. The sleeve is movable in order to allow selectively viewing any of the markings on the catheter body. Once a certain marking has been identified, the sleeve may be moved to identify a different marking.

Selecting a new identification marking simply requires rotating the sleeve to a new marking on the catheter. Such an easily changed marking system is contradistinct to the permanent marking system of the invention which would require complete disassembly and subsequent re-cutting of the cable in order to identify a different mark. Such an easily changed marking system would also be error prone if removed from the highly controlled environment of an operating room and used in the environment contemplated for the electrical connector.

Applicant next submits that, as applied to the catheter, the window of Thompson is positioned to allow viewing the surface of the underlying catheter body. Such a positioning is analogous to positioning the window of the embodiments shown in Figures 4A-4C of the application to view the surface of the underlying connector body. However, viewing the underlying connector body would fail to allow identification of the cable because the connector body carries no identification marks. Thus, the Thompson apparatus suggests an identification method which fails to address the problem of the APA solved by the invention.

Accordingly, there is no motivation to combine Thompson with the APA because the identification system of Thompson is temporary, error prone, and would identify a connector body rather than a cable. Also, even if the APA and Thompson were combined, it would not result in the claimed invention. In fact, Thompson teaches away from being combined with the APA to produce the invention.

*The Thompson identification
apparatus precludes strain relief*

The Thompson sleeve can not provide mechanical support because it must move on the catheter. As such, the sleeve is designed to be readily moved with finger pressure rather than protect against cable flex caused by undue pressure. Additionally, lack of mechanical support to a cable is further precluded because the sleeve does not contact any cable which may be attached to the catheter.

As noted above, one function of the strain relief clamp of the APA is to provide mechanical support for the cable affixed to the connector body. Thus, the strain relief clamp must be solidly fixed to the connector body. Additionally, the strain relief clamp must contact the cable. Thompson does neither. Consequently, the marking system taught by Thompson would destroy the functionality of the strain relief clamp of the APA and there would be no motivation to combine the two.

For the above-stated reasons, it is improper to combine Thompson with the APA because one is from the medical arts and the other from the electrical engineering arts, making the references insufficiently related to one another. Also, it is improper to combine the references because Thompson shows a marking apparatus which is temporary, error prone, and marks a different location than that needed to solve the problem of the APA, and thus teaches away from the combination. Additionally, it is improper to combine the references because the marking apparatus of Thompson precludes the strain relief function of the APA, and thus the combination would be inoperable for its intended purpose.

Claims 4 and 5 are allowable

Applicant further submits that Thompson would teach away from claims 4 and 5 because the sleeve of Thompson must select a marking from a group of adjacent markings, it is configured so that only the window itself is transparent. All other portions of the sleeves must be opaque to avoid simultaneously revealing other and incorrect markings. This is in contrast to claim 4 which sets forth that a transparent portion includes a transparent ring which allows one to view the entire cable in cases where the identification number may not be aligned with a window. Consequently, claim 4 is distinguishable claim. Claim 5 is allowable at least for the same reasons as claim 4 from which it depends, as well as for its added feature of being positioned in a groove. Accordingly, the rejection of claims 4 and 5 should be withdrawn.

In addition to the above reasons, it certainly would not be obvious to provide the steps of the method in view of the combination of references. For example, the method includes cutting a cable so that it will be behind a shell of the connector and placing a strain relief clamp with a transparent portion allowing the markings to be shown. In Thompson, as previously stated, the clamp would be over the connector itself, not allowing the markings of the cable to be shown.

For the above reasons, there is no motivation to combine Thompson and the APA making the two an improper combination. Consequently, claims 1 and 3-7 are in allowable condition and the rejection should be withdrawn.

Claim 2

The Office Action rejects claim 2 over Thompson in view of the APA and further in view of U.S. Patent No. 6,367,897 to Bier, *et al* ("Bier"). For at least the above reasons, claim 1 is in allowable condition. Claim 2 is allowable at least for the reasons discussed above with respect to claim 1 from which it depends as well as for its added features. Applicant respectfully requests that the rejection of claim 2 be withdrawn.

New Claims 8-17

By this amendment, claims 8-17 are added. New independent claim 13 is directed to a connector assembly having a window circumferentially positioned about the entire strain relief clamp. Prompt examination and allowance in due course are respectfully requested.

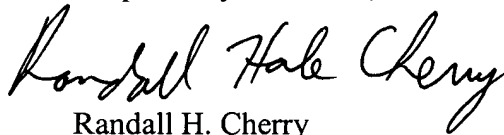
Manfred BOLDY, *et al.*
Serial No.: 10/043,925

--12--

CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 09-0457.

Respectfully submitted,



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